

Remarks

This Amendment is in response to the Office Action, dated 8/14/02. Applicants have canceled claims 2, 24, 25, 27, 28, 30, 54, 55, and 57-61 without prejudice, and have amended claims 1, 23, 26, 29, 32, 42-47, 53 and 56 for greater clarity. No new matter has been added. Claims 1, 3-23, 26, 29, 31-53, and 56 remain pending.

In the Office Action, claims 42-47 and 52 were objected to for informalities. Additionally, claims 1, 2, 21-30 and 53-61 were rejected under 35 U.S.C. 102(b) as allegedly anticipated by U.S. Patent No. 5,655,066 ("Martin et al."), and claims 3-20 and 31-52 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Martin et al. in view of U.S. Patent No. 5,270,688 ("Dawson et al.").

The Objection to Claims 42-47 and 52

Claims 42-47 and 52 were objected to for the reasons stated on page 1 of the Office Action. Applicants have amended the claims herein to correct the informalities. Specifically, the "method" of claims 42 to 47 was amended to correctly read "computer readable medium" and the "method" of claim 51 was amended to correctly read "display." Withdrawal of the objection to claims 42-47 and 52 is respectfully requested.

Summary

One embodiment of the invention obtains both a cursor image and an ancillary image. A composite of those images is formed and the composite image is displayed.

The Rejection under 35 U.S.C. § 102

Claims 1, 2, 21-30, and 53-61 were rejected under 35 U.S.C. § 102, as allegedly anticipated by Martin et al. Of the rejected claims, claims 1, 23, 26, 29, 53 and 56 are independent claims. Applicants respectfully submit that these claims patentably define over Martin et al.

Independent claims 1 and 29 each recite "forming a composite image indication indicative of a composite image containing both the cursor image and the ancillary image..." In

short, this element is nowhere taught or suggested by Martin et al. Martin et al. disclose displaying an icon representing a tool and an associated shadow. Martin et al. do not teach or suggest displaying a cursor by creating a composite image of the cursor image and an ancillary image. In fact, Martin et al. do not discuss, in any respect, how the shadow is created, other than to state that conventional techniques exist for creating a shadow. See Martin et al., col. 6, lines 37-38. Other than this bald statement, Martin et al. are silent as to how a shadow is created. While there may exist conventional techniques for creating a shadow of a displayed object, applicants traverse the assertion that the way of displaying a cursor, as set forth in the specification and recited in claims 1 and 29, is conventional. For at least this reason, claims 1 and 29 are believed to be patentable over Martin et al. Claims 3-22, and claims 30-47 depend directly or indirectly from claims 1 and 29, respectively, are believed to be patentable over Martin et al. for at least the same reason.

Applicants respectfully submit that independent claims 23 and 26 are allowable over Martin et al as well. Claims 23 and 26 each recite "the controller being configured to display the ancillary image as an image formed by light impinging on a surface after passing through the cursor image," an element neither taught nor suggested by Martin et al. either at the location suggested in the Office Action, or anywhere else in the reference. Martin et al. recite only a shadow of a cursor, and show the same in their figures. The shadow of Martin et al. is not described anywhere as an image formed by light impinging on a surface after passing through the cursor image. For at least this reason, claims 23 and 26 are believed to be patentable over Martin et al.

Applicants further respectfully submit that independent claim 53 is allowable over Martin et al. Claim 53 recites that "the shadow and the cursor are formed integrally with one another." This element is nowhere taught or suggested by Martin et al. While Martin et al. discuss shadows of cursors, Martin et al. do not discuss their formation other than to suggest using traditional means. This reference does not in any way suggest forming the shadow and the cursor integrally with one another. For at least this reason, claim 53 is believed to be patentable over Martin et al.

Applicants further submit that independent claim 56 is allowable over Martin et al. Claim 56 recites "displaying the cursor and shadow as a single image based on the cursor image

information,” an element nowhere taught or suggested by Martin et al. Martin et al. discuss shadows of cursors, but do not discuss their display other than to suggest using traditional means. This reference does not in any way suggest displaying the shadow and the cursor as a single image. For at least this reason, claim 56 is believed to be patentable over Martin et al.

The Rejection under 35 U.S.C. § 103

On page 3 of the Office Action, the Examiner rejected claims 3-20 and 31-52 as being obvious over Martin et al. in view of Dawson et al. Of these claims, claims 48 and 51 are independent claims. Applicant respectfully submits that independent claims 48 and 51 are not obvious by Martin et al. or Dawson et al., taken alone or in combination. Claims 48 and 51 each recite “an alpha blended AGRB image,” which is not taught or shown in either reference. Martin et al. do not discuss or show alpha blending, AGRB images or the combination. Dawson et al. discuss red, green, and blue pixel values, and applying a filter to decide whether to turn on or off each of the values red, green, and blue for a cursor at a specific pixel location. However, alpha values are not discussed, nor is alpha blending. Since neither reference teaches or suggests “an alpha blended AGRB image,” claims 48 and 51 patentably define over Martin et al. and Dawson et al., taken alone or in combination. For at least this reason, claims 48 and 51 are believed to be patentable over Martin et al. in view of Dawson et al. Claims 49-50 and 52 depend from claims 48 and 51, respectively, and are believed allowable for the same reasons.


Conclusion

Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action, and submit that Claims 1, 3-23, 26, 29, 31-53, and 56 of the application are in condition for allowance. Favorable consideration and passage to issue of the application at the Examiner’s earliest convenience is earnestly solicited.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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MARKED-UP VERSION OF REPLACEMENT CLAIMS

Please amend claims 1, 23, 26, 29, 32, 42-47, 52, 53, and 56, as follows:

1. (Amended) A method of displaying a cursor, comprising:
obtaining a cursor image indication, indicative of a cursor image;
obtaining an ancillary image indication, indicative of an ancillary image, based on the
cursor image indication;
forming a composite image indication indicative of a composite image containing both
the cursor image and the ancillary image, a location at which the ancillary image
is located being based on a location at which the cursor image is located; and,
displaying the composite image.
23. (Amended) A computer system, comprising:
a user input device providing a user input signal indicative of user inputs;
a display device;
a controller, coupled to the user input device and the display device, configured to receive
the user input signal, display a cursor image on the display device based on the
user input signal, and display an ancillary image based on at least one
characteristic of the cursor image, the controller being configured to display the
ancillary image to move based on movement of the cursor image on the display
device; and
the controller being configured to display the ancillary image as an image formed by light
impinging on a surface after passing through the cursor image.
26. (Amended) A display on a computer display device, the display comprising:
a cursor image displayed on the display device based on a user input; and
an ancillary image displayed on the display device at a position based on a position of the
cursor image and having an appearance based on an appearance characteristic of

the cursor image, and appearing as an image formed by light impinging on a surface after passing through the cursor image.

29. (Amended) A computer readable medium containing instructions which, when executed by a computer cause the computer to perform steps of:

- obtaining a cursor image indication, indicative of a cursor image;
- obtaining an ancillary image indication, indicative of an ancillary image, based on the cursor image indication;
- forming a composite image indication indicative of a composite image containing both the cursor image and the ancillary image, a location at which the ancillary image is located being based on a location at which the cursor image is located; and
- displaying the composite image.

32. (Amended) The computer readable medium of claim 29, further comprising:

- wherein obtaining a cursor image indication comprises obtaining a cursor AND-mask;
- and
- wherein obtaining an ancillary image indication comprises obtaining an ALPHA-mask based on the cursor AND-mask.

42. (Amended) The computer readable medium of claim 32 wherein the displaying step comprises:

- blending the ancillary image to a display screen based on the ALPHA-mask; and
- blending the cursor image to the display screen based on the cursor AND-mask.

43. (Amended) The computer readable medium of claim 42 wherein blending the ancillary image and blending the cursor image are performed by blending a composite image, including an ancillary image component and a cursor image component, to the display screen.

44. (Amended) The computer readable medium of claim 32 wherein the displaying step comprises:

blending the ancillary image to a display screen using according to a function having a first term corresponding to a portion of the ancillary image displayed and a second term corresponding to a portion of an underlying image displayed.

45. (Amended) The computer readable medium of claim 32 and further comprising:
softening the ALPHA-mask.

46. (Amended) The computer readable medium of claim 45 wherein the softening step comprises:

filtering the ALPHA-mask with an averaging filter a desired number of times.

47. (Amended) The computer readable medium of claim 46 wherein the desired number of times is based on data associated with an image underlying a displayed position of the cursor image.

52. (Amended) The display of claim 51 wherein the cursor comprises:
a composite image with per pixel alpha and color values.

53. (Amended) A displayed image on a computer screen comprising:
a cursor with a shadow; and
wherein the shadow and the cursor are formed integrally with one another.

56. (Amended) A computer readable medium having instructions stored thereon which, when executed, perform a method comprising:

obtaining cursor image information indicative of a cursor and a shadow; and
displaying the cursor and shadow as a single image based on the cursor image

information.